



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/202,423	04/29/1999	SIMON DANIEL BRUECKHEIMER	476-1620	2884

7590

07/24/2002

LEE MANN SMITH MCWILLIAMS SWEENEY OHLSON  
PO BOX 2786  
CHICAGO, IL 606902786

EXAMINER

VINCENT, DAVID ROBERT

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 07/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/202,423

Applicant(s)

BRUECKHEIMER ET AL.

Examiner

David R Vincent

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 2661

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It has been held that the functional "whereby" statement does not define any structure/step and accordingly can not serve to distinguish. In re Mason, 114 USPQ 127, 44 CCPA 937 (1957).

3. While applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "router" specified in various forms in claims 1-17 is used by the claim to mean "switch/switching which read/use layer two data/addresses," while the accepted meaning is "router/routing by reading layer three data/addresses."

Generally routing is done in software and switching in hardware.

For the purposes of examining, the terms relating to routing will be considered a very broad interpretation of

Art Unit: 2661

switching or merely another term that implies forwarding or transmitting.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duault (US 5,600,641).

Since the terms in the claims are not further defined and since the use of the term router is not fully clear, the claims may be read very broadly. For example, claim 11 (a three line independent claim which was not listed as claim 1 as it was supposed to be see

M.P.E.P. 2173.05(n).

(g) The least restrictive claim should be presented as claim number 1, and all dependent claims should be grouped together with the claim or claims to which they refer to the extent practicable.) does not further define terms like "traffic status, or virtual transit exchange. Therefore, this claim and

Art Unit: 2661

most others can be read as meaning nothing more than e.g., an ATM switching system which uses call admission control (CAC) and detects traffic parameters in order for the QoS to be checked and guaranteed and for the ATM PNNI routing protocol to operate properly, and ATM AAL-1 (ATM adaptation layer) which is used for T1 type traffic which carries narrow band traffic (24, 64 kbps lines).

As shown in Figs. 1-16, Duault discloses an ATM system comprised of routing switches (switches using OSPF and/or PNNI, col. 3, lines 11-33; switch routing header, col. 4, lines 1-10), multicasting (col. 2, lines 41-54), dealing with failures (col. 2, lines 41-64), virtual transit exchange (Figs. 1-6), load balancing (guaranteeing QoS all traffic cannot take the same path; handling different types of traffic, col. 1, lines 48-67; using topology updates, cols. 2-3), prioritizing routes (guaranteeing delay parameters/QoS for voice/T1 and other lines, e.g., col. 3), assessment of congestion (determining if the the delay parameters can be guaranteed or not), rejecting traffic at a source (denying the call set up using, e.g., Q.2931 and determining that Q.2931 messages were not acknowledged by destination or that QoS could not be guaranteed). However, Duault fails to include the inherent details of ATM and does not use the term virtual transit exchange.

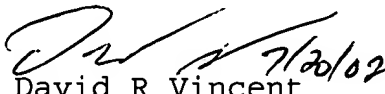
Art Unit: 2661

It would have been obvious that ATM uses Q.2931 and information elements when setting up connections and that a virtual transit exchange can be a group of switches or forwarding devices that are used temporarily to carry virtual connections and or virtual paths. This can be done for reasons related to the lest cost routing which most routers and ATM switches perform.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R Vincent whose telephone number is 703 305 4957. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on 703 305 4703. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9314 for regular communications and 703 872 9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 306 0377.

  
David R Vincent  
Primary Examiner  
Art Unit 2661